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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,007	03/16/2004	Leo M. Pedlow JR.	SNY-T5712.02	3328

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MILLER PATENT SERVICES  
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RALEIGH, NC 27606

EXAMINER
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CHEN, SHIN HON

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/802,007

Applicant(s)

PEDLOW ET AL.

Examiner

Shin-Hon Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4 and 11-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 11-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 4/25/06, 4/3/06

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 4, 11 and 31 have been examined.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 and 11-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colligan et al. U.S. Pat. No. 6415031 (hereinafter Colligan) in view of Nardone et al. U.S. Pat. No. 5805700 (hereinafter Nardone) and further in view of Simec et al. U.S. Pub. No. 20040010717 (hereinafter Simec)..

4. As per claim 19, Colligan discloses a method of processing digital video content, wherein the digital video content comprises intra-coded frames and inter-coded frames, the method comprising: selecting a plurality of the intra-coded frames for encryption to produce selected frames (Colligan: column 11 lines 48-57: if I-Frame data is indicated, then selective encryption takes place); encrypting the selected frames under a first encryption algorithm to produce first encrypted frames (Colligan: column 7 lines 45-59: different types of encryption algorithms may be applied for encryption); storing the inter-coded frames in a first file; storing the intra-coded

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frames, whether encrypted under the first encryption algorithm or unencrypted, in a second file (Colligan: column 7 lines 35-59; column 11 lines 48-57: if different types of encryptions take place, only I-frame portion of the data are different); duplicating the intra-coded frames; encrypting duplicates of the selected frames under a second encryption algorithm to produce second encrypted frames (Colligan: column 7 lines 35-59; column 11 lines 48-57: different algorithms may be used); storing the intra-coded frames, whether encrypted under the second encryption algorithm or unencrypted, in a third file (Colligan: column 7 lines 35-44: the data are pre-encrypted); receiving a request from a subscriber terminal for the digital content; and retrieving the content from the first file and the third file; and sending the content to the subscriber terminal. (Colligan: column 7 lines 35-44: VOD system). Colligan does not explicitly disclose that the selecting a plurality of intra-coded frames for encryption. However, Nardone discloses that limitation (Nardone: column 6 lines 34-45: only selected I-frames are selected for encryption). It would have been obvious to one having ordinary skill in the art to encrypt selected I-frames for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Nardone within the system of Colligan because it reduces overhead to encrypt the entire content. Colligan as modified does not explicitly disclose determining that the subscriber is enabled for decryption of content under the first/second encryption algorithm. However, Simec discloses checking subscriber configurations prior to transmitting data to subscribers (Simec: [0015]-[0016]). It would have been obvious to one having ordinary skill in the art to determine if the subscriber is authorized to decrypt the protected data prior to sending the data. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's

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invention to combine the teachings of Simec within the combination of Colligan-Nardone because it prevents unauthorized devices from copying protected digital data.

5. As per claim 20, Colligan as modified discloses the method of claim 19. Colligan as modified further discloses the content is retrieved from the first and third files in an order of sequential frames in the content (Nardone: column 3 lines 19-28).

6. As per claim 4, 11-18 and 21-31, claims 4, 11-18 and 21-22 encompass the same scope as claims 19-20. Therefore, claims 1-18 and 21-22 are rejected based on the same reason set forth in claims 19 and 20.

### ***Response to Arguments***

7. Applicant's arguments filed on 5/22/06 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant argues that prior art of record requires multiple keys for decryption while present application discloses using only one key is needed for decryption. However, the claim language is silent on the number of keys required for decryption. Therefore, applicant's argument is respectfully traversed.

Furthermore, applicant argues that the prior art of record does not disclose duplicating and selecting intracoded frames for encryption and apply different algorithms for each copy. However, Colligan discloses that different encryption algorithms can be applied to the same video source after indicating which frame for encoding (Colligan: column 7 lines 35-59; column

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11 lines 48-57: different algorithms may be used). Therefore, multiple copies of the same video content must have been used in multiple encryption techniques.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

CARNY et al. U.S. Pub. No. 20020150239 discloses method for **encrypting copies of different segments of a video data using different encryptions** by first removing the selected segments from the original digital content (Carny: [0008]-[0038]).

Candelore U.S. Pub. No. 20030145329 discloses selective encryption for video on demand.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen  
Examiner  
Art Unit 2131

SC

  
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